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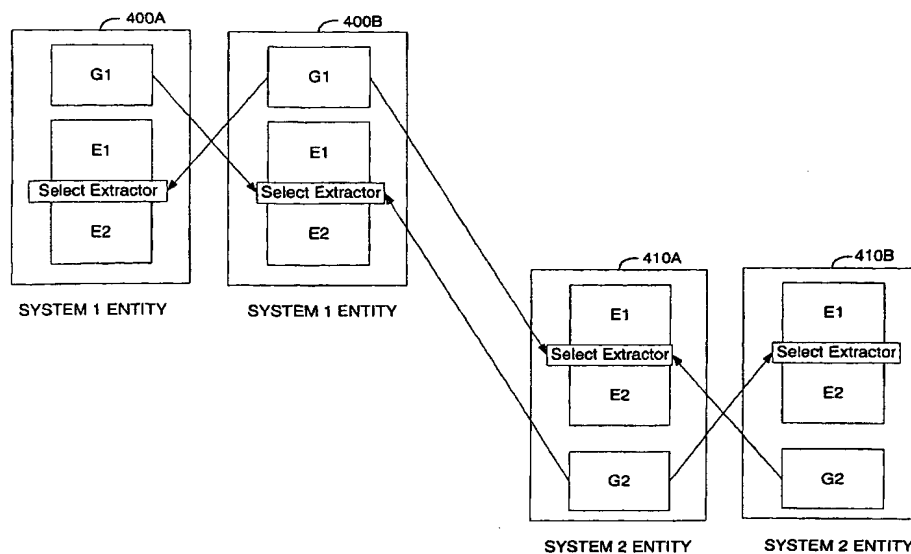
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(54) Title: TANDEM-FREE VOCODER OPERATIONS BETWEEN NON-COMPATIBLE COMMUNICATION SYSTEMS



(57) Abstract: Tandem-free vocoder operations (TFO) between non-compatible communication systems may be enabled through hardware modifications at communication elements within each system. In one aspect, each infrastructure entity in System 1 comprises an intra-system TFO Frame Generator  $G_1$ , an intra-system TFO Frame Extractor  $E_1$ , and a TFO Frame Extractor  $E_2$  of System 2, which is non-compatible to System 1. Each infrastructure entity in System 2 comprises an intra-system TFO Frame Generator  $G_2$ , an intra-system TFO Frame Extractor  $E_2$ , and a TFO Frame Extractor  $E_1$  of System 1.

WO 2004/040927 A2



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